

IN THE CLAIMS

Please amend the following claims which are pending in the present application:

1-7. (Cancelled)

8. (Previously amended) A wafer comprising:

a layer of solid diamond;

a final monocrystalline semiconductor film on the layer of solid diamond; and

a layer of monocrystalline semiconductor material directly on the final

monocrystalline semiconductor film with a boundary defined between the final

monocrystalline semiconductor film and the layer of monocrystalline semiconductor

material for purposes of shearing the layer of monocrystalline semiconductor

material from the final monocrystalline semiconductor film.

9. (Original) The wafer of claim 8 wherein the layer of solid diamond is at least 200 mm wide.

10. (Original) The wafer of claim 9 wherein the layer of monocrystalline semiconductor material is at least 200 mm wide.

11. (Original) The wafer of claim 10 wherein the layer of monocrystalline semiconductor material is a layer of monocrystalline silicon.

12. (Currently amended) A singulated die comprising:

a layer of solid diamond having [an exposed lower surface] a thickness of less than 150 microns;

a layer of monocrystalline semiconductor material on the layer of solid diamond; [and]

a bonding material bonding the layer of solid diamond to the layer of monocrystalline semiconductor material; and

an integrated circuit on a side of the layer of monocrystalline semiconductor material opposing the layer of solid diamond.

13. (Currently amended) The singulated die of claim 12 wherein [further comprising:

a layer of monocrystalline semiconductor material on] the layer of solid diamond[, the integrated circuit being formed on the layer of monocrystalline semiconductor material.] has an exposed lower surface.

14. (Original) The singulated die of claim 13 wherein the layer of monocrystalline semiconductor material is a layer of monocrystalline silicon.

15. (Previously amended) The singulated die of claim 14 further comprising:
a layer of polysilicon between the layer of monocrystalline silicon and the layer of solid diamond.

16. (Original) The singulated die of claim 12 further comprising:
a plurality of contacts on the integrated circuit.

17. (Previously amended) The singulated die of claim 12 wherein the die has a rectangular outline when viewed from above.

18-24. (Cancelled)

25. (Currently amended) A wafer, comprising:
a layer of solid diamond having a thickness of less than 150 microns; and
a layer of monocrystalline semiconductor material on the layer of solid diamond[; and] having a thickness of less than 25 microns.

[a plurality of integrated circuits in rows and columns on the layer of monocrystalline semiconductor material, with the layer of monocrystalline semiconductor material between the layer of solid diamond and the rows and columns of integrated circuits.]

26. (Cancelled)

27. (Currently amended) The wafer of claim 25 wherein [a] the layer of monocrystalline semiconductor material is a layer of silicon.

28. (New) The wafer of claim 25 further comprising:
a plurality of integrated circuits in rows and columns on a side of the monocrystalline semiconductor material opposing the layer of solid diamond.

29. (New) The wafer of claim 28 further comprising:
a layer of semiconductor material on a side of the layer of solid diamond opposing the layer of monocrystalline semiconductor material.